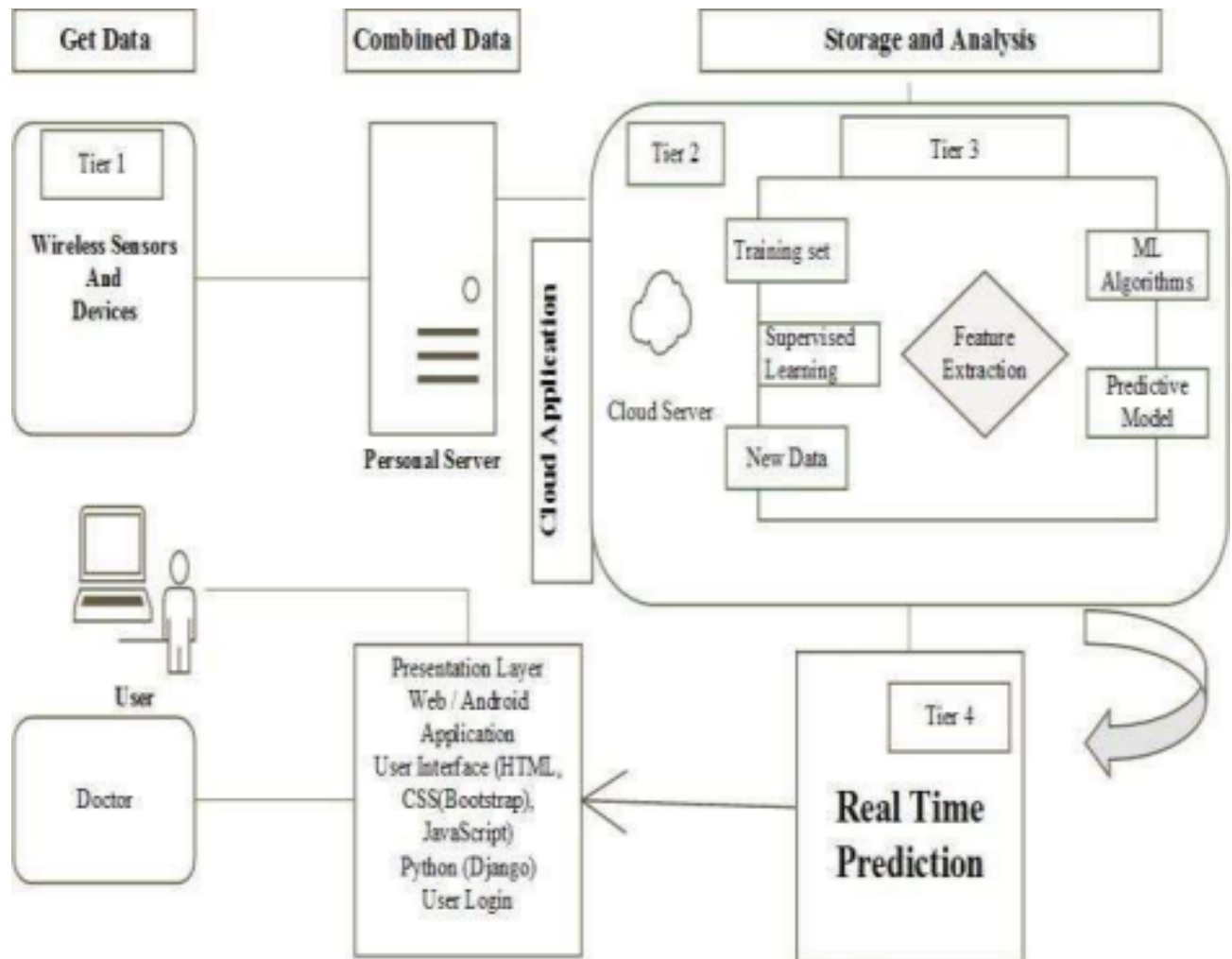


# Visualizing and Predicting Heart Diseases with an Interactive Dashboard

|              |   |
|--------------|---|
| Date         | 3 October 2022  |
| Team ID      | PNT2022TMID19891  |
| Project Name | Visualizing and Predicting Heart Diseases with an Interactive Dashboard |

## Technical Architecture:



**Table-1 : Components & Technologies:**

| S.No | Component                          | Description  | Technology   |
|------|------------------------------------|--|--|
| 1.   | User Interface                     | How user interacts with application<br>Example: Web UI, Mobile App, etc.   | HTML, CSS, Python etc.   |
| 2.   | Application Logic-1                | Logic for a process in the application   | Python   |
| 3.   | Application Logic-2                | Logic for a process in the application   | IBM Cognos Analytics   |
| 4.   | Application Logic-3                | Logic for a process in the application   | IBM Watson Assistant   |
| 5.   | Database                           | Data Type, Configurations etc..  | MySQL  |
| 6.   | Cloud Database                     | Database Service on Cloud  | IBM DB2, IBM Pak   |
| 7.   | File Storage                       | File storage requirements  | Use Professional Records Storage, IBM Block Storage or Other Storage Services. |
| 8.   | External API                       | Purpose of External API used in the application  | IBM SPSS, etc..  |
| 9.   | Infrastructure<br>(Server / Cloud) | Application Deployment on Local System / Cloud<br><br>Local Server Configuration<br><br>Cloud Server Configuration | Personal Server, IBM Cloud Server  |

**Table-2: Application Characteristics:**

| <b>S.No</b> | <b>Characteristics</b>   | <b>Description</b>                                       | <b>Technology</b>   |
|-------------|--------------------------|--|---|
| 1.          | Open-Source Frameworks   | Open-source frameworks used                              | Technology of Open Source framework – Django or Flask in Python.  |
| 2.          | Security Implementations | Security / access controls implemented, use of firewalls | Example: Privacy - Encryptions, IBM Security Manager etc..  |
| 3.          | Scalable Architecture    | Scalability of architecture (3 – tier, Microservices)    | Technology used - IaaS, PaaS, SaaS (IBM Cloud).   |
| 4.          | Availability             | Availability of application                              | Technology used - The Availability of getting used to this software or product design is through by accessing IBM cognos Analytics and IBM cloud.   |
| 5.          | Performance              | Performance of the application                           | Technology used - The performance should be fast relaying. This prediction system should be made available in cloud to ensure better accessibility and setting a milestone in providing good quality affordable healthcare. |

**References :**

<https://www.ibm.com/products/cognos-analytics>

<https://cloud.ibm.com/catalog/services/watson-assistant>

<https://www.ibm.com/in-en/cloud-paks>

<https://www.ibm.com/cloud>